EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	46852	"709"/$.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/08/08 12:41
L2	43913	1 and (computer$2 or node$2)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/08/08 12:42
L3	17584	1 and node$2	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/08/08 12:42
L4	6994	3 and model	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/08/08 13:11
L5	360	4 and (train or training same data)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/08/08 13:13
L6	9	5 and (candidate same condition)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/08/08 13:59
L7	19684	(generat$3 or creat$3 same model) and (plurality or plural same node$2) and (select$3 same candidate)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/08/08 14:07
L8	13	(generat$3 or creat$3 same model) and (plurality or plural same node$2) and (select$3 same (candidate adj1 condition))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/08/08 14:04
L9	0	(generat$3 or creat$3 same model) and (plurality or plural same node$2) and (select$3 same (candidate adj1 condition)) and (request$3 same statistic$2)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/08/08 14:03

EAST Search History

L10	0	(generat$3 or creat$3 same model) and (plurality or plural same node$2) and (select$3 same (candidate adj1 condition)) and (request$3 same statistic$2)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/08/08 14:05
L11	0	(request$3 same statistic$2) with (candidata adj1 condition) near3 node$2	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/08/08 14:06
L12	0	(request$3 same statistic$2) with (candidata adj1 condition)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/08/08 14:06
L13	1229	"707"/$.ccls. and ((generat$3 or creat$3 same model) and (plurality or plural same node$2) and (select$3 same candidate))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/08/08 14:07
L14	1	"707"/$.ccls. and ((generat$3 or creat$3 same model) and (plurality or plural same node$2) and (select$3 same candidate adj1 condition))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/08/08 14:08
L15	0	"709"/$.ccls. and ((generat$3 or creat$3 same model) and (plurality or plural same node$2) and (select$3 same candidate adj1 condition))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/08/08 14:08
L16	26938	"709"/$.ccls. and ((generat$3 or creat$3 same model) and (plurality or plural same node$2))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/08/08 14:09
L17	26685	"709"/$.ccls. and ((generat$3 or creat$3 same model) and (plurality or plural same node$2) and (generat$3 or form$3 same rule same base))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/08/08 14:10
L18	0	(request$3 same statistic$2) and (candidate adj1 condition) near3 node$2	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/08/08 15:22
L19	10	("6006222" "6014665" "6078916" "6182068" "6539377").pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/08/08 14:33

EAST Search History

L20	0	19 and ((request$3 same statistic$2) and (candidate adj1 condition) near3 node$2)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/08/08 15:28
L21	193	"classification model" and "training data"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/08/08 15:29
L22	0	"classification model" and "training data" and "candidate condition"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/08/08 15:32
L23	29	"classification model" and "training data" and "rule based"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/08/08 15:32
L24	25	("classification model" and "training data" and "rule based") and statistic$2	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/08/08 15:33
L25	7	"707"/$.ccls. and (("classification model" and "training data" and "rule based") and statistic$2)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/08/08 15:34

Set	Items	Description
S1	563	(CLASSIFY??? OR CLASSIFIE? ? OR CLASSIFICATION)(3N)(MODEL?-?? OR MODELL???)
S2	8743	MACHINE(3N)LEARN??? OR AI OR ARTIFICIAL()INTELLIGENCE
S3	1660748	CONDITION? ? OR FEATURE? ? OR INSTANCE? ?
S4	36228	STATISTIC?? OR STATS OR NUMERIC??(3N)(DATA OR INFORMATION)
S5	692758	RESPONSE? ? OR RESPOND???
S6	267654	RULE OR RULES OR RULESET? ? OR INSTRUCTION? ?
S7	19772	S6(3N)(ADD OR ADDS OR ADDED OR ADDING OR ADDITION?? OR INC-LUD??? OR INCLUSION OR INCORPORAT???)
S8	2	S1 AND S2 AND S3 AND S4:S5
S9	45	S1 AND S3 AND S4:S5
S10	3	S9 AND S7
S11	3	S10 NOT S8
S12	32	S9 NOT AD=20031216:20060809/PR
S13	6	S12 AND S6
S14	4	S13 NOT (S8 OR S11)
S15	157569	MODEL??? OR MODELL???
S16	17	S15 AND S3 AND S4 AND S7
S17	16	S16 NOT (S8 OR S11 OR S14)
S18	9	S17 NOT AD=20031216:20060809/PR
S19	29664	NODE? ?(3N)(MULTI OR MULTIPLE OR MULTIPLICITY OR PLURAL OR PLURALITY OR TWO OR SECOND OR MANY OR SEVERAL OR NUMEROUS)
S20	6	S19 AND S1
S21	118	S15 AND S3 AND S4 AND S6
S22	5	S21 AND S19
S23	5	S22 NOT (S8 OR S11 OR S14 OR S17 OR S20)
S24	7	S1 AND S7

0015881274 - Drawing available
WPI ACC NO: 2006-412951/200642
XRPX Acc No: N2006-341949
Networked industrial control system has analyzer that employs rules -based
determination and statistical **analysis to distribute controller-based
resources to industrial controllers**
Patent Assignee: ROCKWELL AUTOMATION TECHNOLOGIES INC (ROCW)
Inventor: BAIER J J; BATKE B A; BROOKS P D; CALLAGHAN D M; MORSE R A; NESI
   J; VASKO D A; WYLIE D R
Patent Family (1 patents, 1 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	
US 7058712	B1	20060606	US 2002162264	A	20020604	200642	B

Priority Applications (no., kind, date): US 2002162264 A 20020604

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
US 7058712	B1	EN	17	8	

Alerting Abstract US B1
   NOVELTY - The analyzer has **classification models** to learn data
patterns related to queried resources, for generating probabilities that
predict possible future data patterns. The analyzer employs **rules** -based
determination, algorithmic determinations, **statistical** analysis and
inference analysis to distribute the controller-based resources to the
industrial controllers.
   DESCRIPTION - The analyzer comprises **classification models e.g.
support vector machines (SVM), Naive Bayes, Bayes Net, decision tree,
similarity-based and vector-based models to learn data pattern related to
queried resources. The analyzer employs statistical** analysis such as
averaging, standard deviations, comparisons, sampling, frequency and
periodicity determinations to distribute the controller-based resources to
the industrial controller. The analyzer also uses general probabilistic
estimate to determine a performance **condition** given monitored evidence of
an input pattern. The estimate is stated as $Pr(CpEl - E$
   $J)$, where `Pr' is a probability, `Cp' relates to a monitored performance
condition given evidence, `E' relating to differences from monitored
patterns and `J' is an integer. The evidence includes consistency data with
a previous pattern to predict likely future outcomes. The distribution
engines and associated drivers propagate controller-based resources between
industrial controllers and the remote system e.g. computer, workstation,
communication module, input/output device and network device.
   USE - For controlling industrial processes, manufacturing equipment,
factory automation using internet.
   ADVANTAGE - The analyzer transforms XML data to other protocols to
facilitate more efficient processing of data required from other sources. A
flexible application distribution framework is used to support distributed
processing and configuration within industrial controller environment.
Application or component distribution testing and configuration is
automated in accordance with coordinated component interactions to improve
overall performance.
   DESCRIPTION OF DRAWINGS - The figure shows the flow diagram explaining
the resource processing and distribution in industrial controller
environment.

Title Terms/Index Terms/Additional Words: INDUSTRIAL; CONTROL; SYSTEM; ANALYSE; EMPLOY; **RULE** ; BASED; DETERMINE; **STATISTICAL** ; DISTRIBUTE; RESOURCE

Class Codes
International Classification (+ Attributes)
IPC + Level Value Position Status Version
  G05B-0011/01 A I L B 20060101
  G05B-0019/42 A I L B 20060101
  G06F-0015/173 A I F B 20060101
  G06F-0015/16 C I F B 20060101
US Classification, Issued: 709224000, 700020000, 700089000

File Segment: EPI;
DWPI Class: T01; T06; W01; W05
Manual Codes (EPI/S-X): T01-J07B; T01-J16A; T06-A04B7; T06-A06A; T06-A07A1; T06-A11; W01-A06A; W05-D06E; W05-D07B; W05-D08C

0014214275 - Drawing available
WPI ACC NO: 2004-400020/
XRAM Acc No: C2004-149755
XRPX Acc No: N2004-318859
Integrated spectral data processing, data mining, and modeling system used in diverse screening and biomarker discovery applications, includes general purpose computer system, machine readable storage medium, and tracking database
Patent Assignee: WARNER LAMBERT CO LLC (WARN)
Inventor: BAKER J D
Patent Family (2 patents, 100 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	
WO 2004038602	A1	20040506	WO 2003US26346	A	20030822	200437	B
AU 2003272234	A1	20040513	AU 2003272234	A	20030822	200468	E

Priority Applications (no., kind, date): US 2002421306 P 20021024

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
WO 2004038602	A1	EN	84	16	

National Designated States,Original: AE AG AL AM AT AU AZ BA BB BG BR BY
    BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID
    IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ
    NO NZ OM PH PL PT RO RU SC SD SE SG SK SL TJ TM TN TR TT TZ UA UG US UZ
    VC VN YU ZA ZM ZW
Regional Designated States,Original: AT BE BG CH CY CZ DE DK EA EE ES FI
    FR GB GH GM GR HU IE IT KE LS LU MC MW MZ NL OA PT RO SD SE SI SK SL SZ
    TR TZ UG ZM ZW

AU 2003272234	A1	EN			Based on OPI patent	WO 2004038602

  Alerting Abstract WO A1
  NOVELTY - An integrated spectral data processing, data mining, and modeling system includes a general purpose computer system; machine readable storage medium containing a set of **instructions** for the computer system; and a tracking database containing the results of the model building, visualization, analysis, and/or prediction of the data. The **instructions** integrate modules into an integrated spectral data processing system.
  DESCRIPTION - An integrated spectral data processing, data mining, and modeling system includes a general purpose computer system; machine readable storage medium containing a set of **instructions** for the computer system; and a tracking database containing the results of the model building, visualization, analysis, and/or prediction of the data. The **instructions** integrate modules into an integrated spectral data processing system. The modules include a module (A) operating on raw data from files created by the analytical spectrographic instrument and storing raw processed data in a file; a module (B) operating on the raw processed data and containing **instructions** for providing data standardization of the raw data and storing standardized individualized spectral data in a file and/or a library of files; a module (C) operating on the standardized individualized spectral data and containing **instructions** for reducing the individualized spectral data into a modeling form and storing the modeling form of the data in a file; and a module (D) operative on the data reduced to modeling form and containing **instructions** providing a user of the system with tools for performing model building, visualization, analysis

and/or prediction of the data.

USE - Used in diverse screening and biomarker discovery applications and in conjunction with an analytical spectrographic instrument collecting data from a chemical or biological sample.

ADVANTAGE - The system provides for automated processing of raw spectral data, data standardization, reduction to data to modeling form, an unsupervised and supervised model building, visualization, analysis, and prediction. It enables the user to perform visual data mining, **statistical** analysis and **feature** extraction.

DESCRIPTION OF DRAWINGS - The figure is a labeled flow chart illustrating the software module.

Title Terms/Index Terms/Additional Words: INTEGRATE; SPECTRAL; DATA; PROCESS; MINE; SYSTEM; DIVERSE; SCREEN; DISCOVER; APPLY; GENERAL; PURPOSE ; COMPUTER; MACHINE; READ; STORAGE; MEDIUM; TRACK; DATABASE

Class Codes
International Classification (Main): G06F-017/10

File Segment: CPI; EPI
DWPI Class: B04; S01; S03; T01
Manual Codes (EPI/S-X): S01-E02A1; S03-E07C; S03-E10A; S03-E14H; T01-J15X; T01-S03
Manual Codes (CPI/A-M): B11-C07B2; B11-C08E; B12-K04

DIALOG(R)File 350:Derwent WPIX
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0010947442
WPI ACC NO: 2001-570210/200164
Related WPI Acc No: 2000-491093; 2001-483110; 2001-483111; 2001-541438;
  2001-582076; 2001-602347; 2001-648154; 2002-372082; 2002-383202;
  2002-454406; 2003-566951; 2003-743767; 2006-117118
XRAM Acc No: C2001-169433
XRPX Acc No: N2001-424947
Development of a multi-tiered calibration model for estimating
concentration of a target blood analyte from measured tissues spectra by
classifying spectral measurements using a calibration set
Patent Assignee: BLANK T B   (BLAN-I); INSTRUMENTATION METRICS INC   (INST-N)
  ; MONFRE S L   (MONF-I); RUCHTI T L   (RUCH-I); SENSYS MEDICAL INC
  (SENS-N); THENNADIL S   (THEN-I)
Inventor: BLANK T B; MONFRE S L; RUCHTI T L; THENNADIL S
Patent Family (7 patents, 92 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	
US 20010021803	A1	20010913	US 1999359191	A	19990722	200164	B
			US 2001825687	A	20010403		
WO 2002080767	A1	20021017	WO 2002US9114	A	20020322	200270	E
US 6512937	B2	20030128	US 1999359191	A	19990722	200311	E
			US 2001825687	A	20010403		
TW 523401	A	20030311	TW 2002106793	A	20020403	200365	E
EP 1372471	A1	20040102	EP 2002763866	A	20020322	200409	E
			WO 2002US9114	A	20020322		
AU 2002306852	A1	20021021	AU 2002306852	A	20020322	200433	E
JP 2004528083	W	20040916	JP 2002578807	A	20020322	200461	E
			WO 2002US9114	A	20020322		

Priority Applications (no., kind, date): US 1999359191 A 19990722; US
  2001825687 A 20010403

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
US 20010021803	A1	EN	19	10	C-I-P of application US 1999359191
WO 2002080767	A1	EN			

National Designated States,Original: AE AL AM AT AU AZ BA BB BG BR BY CA
  CH CN CR CU CZ DE DK DM EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE
  KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU
  SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW
Regional Designated States,Original: AT BE CH CY DE DK EA ES FI FR GB GH
  GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZM ZW

US 6512937	B2	EN			C-I-P of application US 1999359191
					C-I-P of patent US 6280381
TW 523401	A	ZH			
EP 1372471	A1	EN			PCT Application WO 2002US9114
					Based on OPI patent WO 2002080767

Regional Designated States,Original: AL AT BE CH CY DE DK ES FI FR GB GR
  IE IT LI LT LU LV MC MK NL PT RO SE SI TR

AU 2002306852	A1	EN			Based on OPI patent WO 2002080767
JP 2004528083	W	JA	64		PCT Application WO 2002US9114
					Based on OPI patent WO 2002080767

Alerting Abstract US A1
  NOVELTY - Development of a multi-tiered calibration **model** involves
classifying spectral measurements using a calibration set, into previously

defined classes based on prior information of the subject. The calibration set comprises a data set of exemplar spectral measurements from a representative sampling of a subject population.

DESCRIPTION - Development of a multi-tiered calibration **model** involves: **classifying** spectral measurements (I) using a calibration set (a) into previously defined classes (b) using prior information of the subject; classifying the measured spectrum (c) into (b) using instrumental measurements at a tissue measurement site; and extracting **features** from (c) for further classification. (a) Comprises a data set of exemplar (I) from a representative sampling of a subject population. A decision **rule** makes a class assignments.

USE - For developing a multi-tiered calibration model for estimating concentration of a target blood analyte from measured tissue spectra (claimed).

ADVANTAGE - The method localizes calibration and sample spectra into local groups that are used to reduce variation in sample spectra due to co-variation of spectral interferents, sample heterogeneity, state variation and structural variation. The method provides measurement spectra which are associated with localized calibration models that are designed to produce the most accurate estimates for the patient at the time of measurement. The method avoids modeling differences between patients and thus can be generalized to more individuals.

Title Terms/Index Terms/Additional Words: DEVELOP; MULTI; TIER; CALIBRATE; MODEL; ESTIMATE; CONCENTRATE; TARGET; BLOOD; ANALYTE; MEASURE; TISSUE; SPECTRUM; CLASSIFY; SPECTRAL; SET

Class Codes
International Classification (Main): A61B-005/00, A61B-005/145
 (Additional/Secondary): G01N-021/35
US Classification, Issued: 600322000, 250252100, 600322000, 128920000

File Segment: CPI; EngPI
DWPI Class: B04; P31
Manual Codes (CPI/A-M): B04-B04D; B11-C07B2; B12-K04E

0013024551
WPI ACC NO: 2003-103222/200309
XRAM Acc No: C2003-025950
XRPX Acc No: N2003-082503
**Improving the prediction of biological data, useful for organizing
expression of information that facilitates data mining, designing of
capture probes, primers and microarrays for use in biological research**
Patent Assignee: EXIQON AS (EXIQ-N); JAKOBSEN M H (JAKO-I); KOLBERG J G
   (KOLB-I); VISSING H (VISS-I)
Inventor: JAKOBSEN M H; KOLBERG J G; VISSING H
Patent Family (4 patents, 98 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	
WO 2002077640	A2	20021003	WO 2002IB2209	A	20020325	200309	B
US 20030022200	A1	20030130	US 2001278592	P	20010325	200311	E
			US 2002105949	A	20020325		
AU 2002309152	A1	20021008	AU 2002309152	A	20020325	200432	E
AU 2002309152	A8	20051027	AU 2002309152	A	20020325	200624	E

Priority Applications (no., kind, date): US 2002105949 A 20020325; US
   2001278592 P 20010325

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
WO 2002077640	A2	EN	45	4	

National Designated States,Original: AE AG AL AM AT AU AZ BA BB BG BR BY
   BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID
   IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ
   NO NZ OM PH PL PT RO RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG UZ VN
   YU ZA ZM ZW
Regional Designated States,Original: AT BE CH CY DE DK EA ES FI FR GB GH
   GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZM ZW

US 20030022200	A1	EN	Related to Provisional US 2001278592
AU 2002309152	A1	EN	Based on OPI patent WO 2002077640
AU 2002309152	A8	EN	Based on OPI patent WO 2002077640

Alerting Abstract WO A2
NOVELTY - Improving (M1) the prediction of biological data, comprises:

1. inputting data relating to one or more biomolecules into a universal
   database;

2. identifying at least one grouping of data to be obtained from the
   database;

3. inputting at least one data grouping into a neural network program; and

4. adapting a software program including initial design rules to the
   new design rules.

DESCRIPTION - Improving (M1) the prediction of biological data,
comprises:

1. inputting data relating to one or more biomolecules into a universal
   database;

2. identifying at least one grouping of data to be obtained from the universal database;

3. inputting at least one data grouping into a neural network program, which can analyze the data and generate new design rules for predicting biological data; and

4. adapting a software program including initial design rules to the new design rules.

INDEPENDENT CLAIMS are also included for the following:

1. A computer based system for prediction of biological data, comprising:

   1. a database for storing and retrieval of data relating to biomolecules;

   2. a design software program comprising initial design rules, the design software program being configured to be capable of adapting to new design rules; and

   3. a neural network program, which can analyze data stored in the database and generate new design rules;

2. A computer related method (M2) for analysis of biological data, comprising:

   1. generating data from one or more biomolecules;

   2. inputting data into a universal database;

   3. identifying at least one grouping of data to be mined from the universal database;

   4. inputting at least one data grouping into a design software program, the design software program comprising of design rules; and

   5. inputting an output of the design software program to a neural network program which can analyze the data and generate new design rules, which new rules can be inputted into the design program;

3. A computer based method (M3) comprising generating data from one or more biological molecules and utilizing a neural network to manipulate the data;

4. A computer based system for analysis of data, comprising:

   1. An analysis substrate;

   2. A database;

   3. A design software program comprising design rules; and

   4. A neural network program which can analyze data of the design software program;

5. An automated method (M4) for analysis of biological data, comprising inputting data into a computer program which comprises a first mode that provides a training condition , and a second mode that provides a question and answer condition .

USE - The new method (M1), is useful for improving the prediction of
biological data (claimed). The methods, systems and processes of the
present invention are useful for organizing expression of information
relating to biomolecules in a way that facilitated data mining, designing
of capture probes and primers, and designing microarrays for use in
biological research.

Title Terms/Index Terms/Additional Words: IMPROVE; PREDICT; BIOLOGICAL;
  DATA; USEFUL; ORGANISE; EXPRESS; INFORMATION; FACILITATE; MINE; DESIGN;
  CAPTURE; PROBE; PRIME; RESEARCH

Class Codes
International Classification (Main): C12Q-001/68, G01N-033/48, G06F-019/00
 (Additional/Secondary): G06F-017/30
US Classification, Issued: 435006000

File Segment: CPI; EPI
DWPI Class: B04; D16; S03
Manual Codes (EPI/S-X): S03-E14H
Manual Codes (CPI/A-M): B04-E01; B11-C08E6; B11-C08F1; B12-K04F; D05-H09

0005287752 - Drawing available
WPI ACC NO: 1990-283873/
XRPX Acc No: N1990-218921
**Determination of phonological rules in speech recognition system - combines
pairs of prototype clusters that exhibit** statistical **differences of less
than threshold value to generate new prototype cluster**
Patent Assignee: IBM CORP (IBMC); INT BUSINESS MACHINES CORP (IBMC)
Inventor: BAHL L R; BROWN P F; DESOUZA P V; MERCER R L
Patent Family (4 patents, 4 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	
EP 387602	A	19900919	EP 1990103824	A	19900227	199038	B
US 5033087	A	19910716	US 1989323479	A	19890314	199131	E
EP 387602	B1	19940727	EP 1990103824	A	19900227	199429	E
DE 69010941	E	19940901	DE 69010941	A	19900227	199434	E
			EP 1990103824	A	19900227		

Priority Applications (no., kind, date): US 1989323479 A 19890314

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
EP 387602	A	EN			

Regional Designated States,Original: DE FR GB IT

| EP 387602 | B1 | EN | 37 | | |

Regional Designated States,Original: DE FR GB IT

| DE 69010941 | E | DE | | | Application EP 1990103824 |

Based on OPI patent   EP 387602

Alerting Abstract EP A
  The generation method comprises the steps of processing a training text
and vocalizations representing the training text to obtain a number of
samples representing the language components of the vocalizations and
selecting, form among the samples, a set of samples representing respective
 instances of a selected language component in the vocalization. Each of
the selected samples is annotated with an indicator of one language
component in a contextual relationship with the selected sample.
  There is a step of generating, from the futher annotated selected
samples, a decision tree that separates the selected samples into
respectively different leaf groups based on the context indicators, each of
the leaf groups representing a pronunciation of the selected language
component in a respectively difference context. The annotated selected
samples are grouped into a set of clusters, each cluster representing a
respectively different pronunciation of the selected language component.
  USE - Recognises continuously spoken words.

Equivalent Alerting Abstract US A
  A continuous speech recognition system **includes** an automatic
phonological **rules** generator which determines variations in the
pronunciation of phonemes based on the context in which they occur.
  This phonological rules generator associates sequences of labels derived
from vocalisations of a training text with respective phonemes inferred
from the training text.
  These sequences are then annotated with their phoneme context from the
training text and clustered into groups representing similar pronunciations
of each phoneme.
  A decision tree is generated using the context information of the

sequences to predict the clusters to which the sequences belong. The
training data is processed by the decision tree to divide the sequences
into leaf-groups representing similar pronunciations of each phoneme.
   The sequences in each leaf-group are clustered into sub-groups
representing respectively different pronunciations of their corresponding
phoneme in a given context. A Markov **model** is generated for each
sub-group.
   The various Markov **models** of a leaf-group are combined into a single
compound **model** by assigning common initial and final states to each
model . The compound Markov **models** are used by a speech recognition
system to analyse an unknown sequence of labels given its context.
   (40pp)

Title Terms/Index Terms/Additional Words: DETERMINE; RULE; SPEECH;
   RECOGNISE; SYSTEM; COMBINATION; PAIR; PROTOTYPE; CLUSTER; EXHIBIT;
   STATISTICAL ; DIFFER; LESS; THRESHOLD; VALUE; GENERATE; NEW

Class Codes
International Classification (Main): G10L-005/06
 (Additional/Secondary): G01L-007/08
US Classification, Issued: 395002000, 381043000

File Segment: EngPI; EPI;
DWPI Class: W04; P86
Manual Codes (EPI/S-X): W04-V01

0014725537 - Drawing available
WPI ACC NO: 2005-073156/
XRPX Acc No: N2005-063086
Computerized text classifier **system, has** modeling **engine calculating set of match scores for concept model by using knowledge base, where each score has associated category with suggested action**
Patent Assignee: COHEN D (COHE-I); HAJAJ N (HAJA-I); MAGDALEN J (MAGD-I) ; NELKEN Y (NELK-I)
Inventor: COHEN D; HAJAJ N; MAGDALEN J; NELKEN Y
Patent Family (1 patents, 1 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	
US 20040254904	A1	20041216	US 2001754179	A	20010103	200508	B
			US 2004839829	A	20040505		

Priority Applications (no., kind, date): US 2001754179 A 20010103; US 2004839829 A 20040505

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
US 20040254904	A1	EN	19	7	C-I-P of application US 2001754179

  Alerting Abstract US A1
  NOVELTY - The system has a pre-processor to analyze text to identify concepts and generate a concept model containing identified concepts. An adaptive knowledge base (118) has a set of learning nodes, each provided with statistical information corresponding to a category. A modeling engine (116) calculates a set of match scores for the model by using the knowledge base. Each score has a category with a suggested action.
  DESCRIPTION - An INDEPENDENT CLAIM is also included for a method of classifying text on a computer.
  USE - Used for classifying text on a computer.
  ADVANTAGE - The statistical engine learns and adapts with every relationship event that it sees, thus maintaining a high level of accuracy over time.
  DESCRIPTION OF DRAWINGS - The drawing shows a block diagram of an electronic communication system.
    100 Electronic communication management system
    112 Contact center
    114 Universal data model
    116 Modeling engine
    118 Adaptive knowledge base
    120 Data access services

Title Terms/Index Terms/Additional Words: COMPUTER; TEXT; CLASSIFY; SYSTEM; ENGINE; CALCULATE; SET; MATCH; SCORE; CONCEPT; MODEL; BASE; ASSOCIATE; CATEGORY; ACTION

Class Codes
International Classification (Main): G06F-017/00
 (Additional/Secondary): G06N-005/02
US Classification, Issued: 706050000, 715500000, 706047000

File Segment: EPI;
DWPI Class: T01; W01
Manual Codes (EPI/S-X): T01-J05B1; T01-J16C; T01-N01A; W01-C05B5E

Computerized text classifier **system, has** modeling **engine calculating set of match scores for concept model by using knowledge base, where each** ...

Original Publication Data by Authority

Claims:
...concepts and generate a concept model containing the identified concepts; a knowledge base having a **plurality** of **nodes** including a set of learning nodes, each of the learning nodes being provided with statistical...

DIALOG(R)File 350:Derwent WPIX
(c) 2006 The Thomson Corporation. All rts. reserv.

0012787162 - Drawing available
WPI ACC NO: 2002-642428/
XRPX Acc No: N2002-507783
**Product information merging method for web-based transactions, involves
generating Naive-Bayes classifier using text and attributes associated with
product information in new hierarchy**
Patent Assignee: INT BUSINESS MACHINES CORP   (IBMC)
Inventor: AGRAWAL R; SRIKANT R
Patent Family (2 patents, 1 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	
US 20020091676	A1	20020711	US 2001757047	A	20010108	200269	B
US 6687705	B2	20040203	US 2001757047	A	20010108	200413	E

Priority Applications (no., kind, date): US 2001757047 A 20010108

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
US 20020091676	A1	EN	7	4	

   Alerting Abstract US A1
   NOVELTY - A Naive-Bayes classifier is generated using text and attributes
associated with the product information in a new hierarchy. The product
information in the new hierarchy, is associated with nodes in main
hierarchy corresponding to highest classification probability for product,
using the classifier.
   DESCRIPTION - INDEPENDENT CLAIMS are included for the following:

   1.Computer system; and

   2.Computer readable storage device storing product information merging
     program.

   USE - For merging product information in different hierarchies, in
web-based transactions.
   ADVANTAGE - The products or product information in the new hierarchy is
merged with product information in main hierarchy easily using simple
technique.
   DESCRIPTION OF DRAWINGS - The figure shows the flowchart illustrating the
computer implemented product information merging process.

Title Terms/Index Terms/Additional Words: PRODUCT; INFORMATION; MERGE;
   METHOD; WEB; BASED; TRANSACTION; GENERATE; CLASSIFY; TEXT; ATTRIBUTE;
   ASSOCIATE; NEW; HIERARCHY
Class Codes
International Classification (Main): G06F-017/00, G06F-017/30
US Classification, Issued: 707002000, 707101000, 707006000, 707007000

File Segment: EPI;
DWPI Class: T01
Manual Codes (EPI/S-X): T01-J05B2B; T01-N01A2A; T01-N03B2A; T01-S03

Original Publication Data by Authority

Original Abstracts:

...for merging product information from a first hierarchy into a second hierarchy. A Naive Bayes **classification** **model** is generated using both text data and attribute (numerical) data pertaining to products in the...

Claims:
...and using the classifier, associating at least some product information in the first hierarchy with **nodes** in the **second** hierarchy...

...and using the classifier, associating at least some product information in the first hierarchy with **nodes** in the **second** hierarchy, wherein the generating act includes multiplying at least one probability based at least partially...

0008803645 - Drawing available
WPI ACC NO: 1998-348855/199830
XRPX Acc No: N1998-272250
**Bandwidth allocation method for packet telecommunications system - mapping
packet network flow based on individual instances of traffic objects, to
defined traffic classes arbitrarily assigned by off-line manager**
Patent Assignee: PACKETEER INC (PACK-N)
Inventor: PACKER R L
Patent Family (4 patents, 7 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	
WO 1998026510	A2	19980618	WO 1997US22550	A	19971208	199830	B
AU 199855967	A	19980703	AU 199855967	A	19971208	199847	E
US 6046980	A	20000404	US 199632485	P	19961209	200024	E
			US 1997977642	A	19971124		
US 6285658	B1	20010904	US 199632485	P	19961209	200154	E
			US 1997977642	A	19971124		
			US 2000479356	A	20000107		

Priority Applications (no., kind, date): US 2000479356 A 20000107; US
   1997977642 A 19971124; US 199632485   P 19961209

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
WO 1998026510	A2	EN	102	5	

National Designated States,Original: AU CN IL JP KR NZ

Number	Kind	Lan	Filing Notes	
AU 199855967	A	EN	Based on OPI patent	WO 1998026510
US 6046980	A	EN	Related to Provisional	US 199632485
US 6285658	B1	EN	Related to Provisional	US 199632485

                                        Continuation of application US
   1997977642

                                        Continuation of patent US 6046980

   Alerting Abstract WO A2
   The method for classifying packet network flows involves applying
individual instances of traffic objects, i.e. packet network flows, to a
classification   model based on selectable information obtained from a
number of layers of a multi-layered communication protocol.
   The flow is then mapped to the defined traffic classes, which are
arbitrarily assignable by an off-line manager which creates the
classification. The classification need not be a complete enumeration of
the possible traffic.
   USE - Managing flow bandwidth utilisation at network, transport and
application layers in store and forward network, for classifying packet
network flows for use in determining policy or rule of assignment of
service level, and enforcing policy by direct rate control.
   ADVANTAGE - Allows classification of traffic according to definable set
of classification attributes selected by manager, including subset of
traffic of interest to be inserted.

Title Terms/Index Terms/Additional Words: BANDWIDTH; ALLOCATE; METHOD;
   PACKET; TELECOMMUNICATION; SYSTEM; MAP; NETWORK; FLOW; BASED; INDIVIDUAL;
   INSTANCE; TRAFFIC; OBJECT; DEFINE; CLASS; ARBITRARY; ASSIGN; LINE; MANAGE

Class Codes
International Classification (Main): G01R-031/08, H04B, H04B-001/00

US Classification, Issued: 370230000, 370229000, 370230000, 370229000

File Segment: EPI;
DWPI Class: T01; W01
Manual Codes (EPI/S-X): T01-H07B; T01-H07C5A; T01-H07C5E; T01-H07C5S;
  T01-S01B; W01-A03B; W01-A06B7; W01-A06E1; W01-A06F; W01-A06G2

Alerting Abstract ...flows involves applying individual instances of
traffic objects, i.e. packet network flows, to a **classification   model**
based on selectable information obtained from a number of layers of a
multi-layered communication...

Original Publication Data by Authority

Original Abstracts:
...method comprises applying individual instances of traffic objects, i.e.,
packet network flows to a **classification   model** based on selectable
information obtained from a plurality of layers of a multi-layered
communication...

...method comprises applying individual instances of traffic objects, i.e.,
packet network flows to a **classification   model** based on selectable
information obtained from a plurality of layers of a multi-layered
communication...

...method comprises applying individual instances of traffic objects, i.e.,
packet network flows to a **classification   model** based on selectable
information obtained from a plurality of layers of a multi-layered
communication...
Claims:
...specification of the parsing step to a plurality of
hierarchically-recognized classes represented by a **plurality of nodes ,**
each **node** having a traffic specification and a mask, according to the
mask; thereupon,having found a...

...said flow specification with one of said plurality of
hierarchically-recognized classes represented by a **plurality   nodes ;**
andallocating bandwidth resources according to a policy associated with
said class by allocating a...

...the flow specification of the parsing step to a plurality of
hierarchically-recognized classes represented **by a plurality of nodes**
, each node having a traffic specification and a mask, according to the
mask; thereupon,having...

...associating said flow specification with one class of said plurality of
hierarchically-recognized classes represented **by a** plurality nodes;
andallocating bandwidth resources according to a policy associated with
said class.

0011186137 - Drawing available
WPI ACC NO: 2002-124157/200217
XRPX Acc No: N2002-093154
State probability approximation method for modeling **probabilistic systems
in Markov networks uses belief propagation and message passing scheme**
Patent Assignee: MITSUBISHI DENKI KK (MITQ); MITSUBISHI ELECTRIC
   INFORMATION TECHNOLO (MITQ); MITSUBISHI ELECTRIC RES LAB INC (MITQ)
Inventor: FREEMAN W T; YEDIDIA J S
Patent Family (3 patents, 28 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	
EP 1160678	A2	20011205	EP 2001110585	A	20010430	200217	B
JP 2002150204	A	20020524	JP 2001166458	A	20010601	200250	E
US 6910000	B1	20050621	US 2000586282	A	20000602	200543	E

Priority Applications (no., kind, date): US 2000586282 A 20000602

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
EP 1160678	A2	EN	49	16	

Regional Designated States,Original: AL AT BE CH CY DE DK ES FI FR GB GR
   IE IT LI LT LU LV MC MK NL PT RO SE SI TR
JP 2002150204   A   JA   113

Alerting Abstract EP A2
   NOVELTY - **Modelling** method includes linked nodes that represent states
of system parts and each link represents **statistical** dependencies between
possible states of related nodes. Nodes are grouped into clusters and based
on size, messages are associated with sets of source and destination nodes
and a message dependent **rule** and on selected links connecting nodes.
Values of messages are updated (321) until a termination **condition** is
reached.
   DESCRIPTION - When a termination state is reached, the probabilities of
the states of the system are determined from the values of the messages.
   An INDEPENDENT CLAIM is also included for a method that determines
approximate probabilities of states of a system represented by a **model** .
   USE - For a method to approximate both the marginal probabilities and
maximum a posteriori probability (MAP) states in Markov networks with
loops.
   ADVANTAGE - The method gives more accurate answers for marginal
probabilities and it can converge to a single answer in cases where a
recursive method does not.
   DESCRIPTION OF DRAWINGS - The figure represents a flow diagram of a
method for propagating beliefs in a network.
   321 Messages update **rules**

Title Terms/Index Terms/Additional Words: STATE; PROBABILITY; APPROXIMATE;
   METHOD; SYSTEM; MARKOV; NETWORK; PROPAGATE; MESSAGE; PASS; SCHEME

Class Codes
International Classification (Main): G06F-017/10, G06F-019/00
 (Additional/Secondary): G06F-017/18
US Classification, Issued: 703002000

File Segment: EPI;
DWPI Class: T01

23/5/3   (Item 3 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2006 The Thomson Corporation. All rts. reserv.

0009580272   - Drawing available
WPI ACC NO: 1999-528006/
XRPX Acc No: N1999-391048
 Modelling **performance of IT system**
Patent Assignee: PEROT SYSTEMS CORP (PERO-N)
Inventor: ADRIAANS P W; GATHIER M; KNOBBE A J
Patent Family (4 patents, 83 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	
WO 1999045467	A1	19990910	WO 1999US4685	A	19990304	199944	B
AU 199928914	A	19990920	AU 199928914	A	19990304	200007	E
EP 1062583	A1	20001227	EP 1999909786	A	19990304	200102	E
			WO 1999US4685	A	19990304		
US 6393387	B1	20020521	US 199836394	A	19980306	200239	E

Priority Applications (no., kind, date): US 199836394   A 19980306

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
WO 1999045467	A1	EN	34	4	

National Designated States,Original: AL AM AT AU AZ BA BB BG BR BY CA CH
    CN CU CZ DE DK EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR
    KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI
    SK SL TJ TM TR TT UA UG UZ VN YU ZW
Regional Designated States,Original: AT BE CH CY DE DK EA ES FI FR GB GH
    GM GR IE IT KE LS LU MC MW NL OA PT SD SE SL SZ UG ZW

AU 199928914	A	EN	Based on OPI patent WO 1999045467
EP 1062583	A1	EN	PCT Application WO 1999US4685
			Based on OPI patent WO 1999045467

Regional Designated States,Original: AT BE CH CY DE DK ES FI FR GB GR IE
    IT LI LU MC NL PT SE

  Alerting Abstract WO A1
  NOVELTY - Method consists in running a test program on a target component
and finding its nodes, monitoring system performance at nodes, collecting
its performance data at the nodes over a set period, determining the causal
relationships between the nodes, and comparing them with a **model** . The
system **model** is then modified and if a causal relationship fails to match
it is added to the **model** and the administrator is alerted. The data is
converted into Boolean values corresponding to performance threshold
conditions for averaging.
  DESCRIPTION - There are INDEPENDENT CLAIMS for (1) an IT system and (2) a
computer program.
  USE - Method is for iteratively determining complex IT systems component
associations.
  ADVANTAGE - Method enables automatic determination of the causal
relationships between various subsystems and elements of complex networks,
accumulates data, reduces the human intervention required and analyzes
system performances with Boolean attributes.
  DESCRIPTION OF DRAWINGS - The drawing shows a block diagram of a system
for adaptive system management.

Title Terms/Index Terms/Additional Words: **MODEL** ; PERFORMANCE; SYSTEM

Class Codes
International Classification (Main): G06F-011/34, G06F-015/173

US Classification, Issued: 703027000, 706014000, 709224000, 709229000,
709234000, 700028000

File Segment: EPI;
DWPI Class: T01
Manual Codes (EPI/S-X): T01-H07C1; T01-H07C5A; T01-J05A1

0007874631 - Drawing available
WPI ACC NO: 1996-505713/199650
XRPX Acc No: N1996-426180
**Fingerprint image data processing - determining in accordance with rule
based classification technique for most probable ones of local pattern
types for identified region of interest**
Patent Assignee: LORAL CORP   (LORA-N)
Inventor: CHANG C; HILBERT E E
Patent Family (1 patents, 1 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	
US 5572597	A	19961105	US 1994219140	A	19940329	199650	B
			US 1995468832	A	19950606		

Priority Applications (no., kind, date): US 1994219140 A 19940329; US
  1995468832 A 19950606

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
US 5572597	A	EN	20	8	Division of application US 1994219140

Alerting Abstract US A
   The method involves prescreening the data to determine locations of
regions of interest in the fingerprint data. E.g. for a determined location
of a region of interest, it requires extracting a set of **feature** vectors
within an area that includes the determined location. The extracted set of
feature vectors is then applied to a number of input **nodes** of a **multi**
-layer neural network. From an output of the multi-layer neural network, it
entails determining a set of probabilities that the set of **feature**
vectors represent individual ones of a plurality of predetermined local
pattern types
   In accordance with a **rule** based classification technique, it allows
determining from most probable ones of the local pattern types for the
identified regions of interest.
   USE/ADVANTAGE - In learning computer program which examines fingerprints
for detection of local pattern forms in region of interest. Robust in
nature, **model** based, while capable of handling and quickly learning by
using fingerprint data which is **statistical** in nature.

Title **Terms**/Index Terms/Additional Words: FINGERPRINT; IMAGE; DATA; PROCESS
  ; DETERMINE; ACCORD; **RULE** ; BASED; CLASSIFY; TECHNIQUE; PROBABILITY;
  LOCAL; PATTERN; TYPE; IDENTIFY; REGION; INTEREST

Class Codes
International Classification (Main): G06K-009/66
US Classification, Issued: 382125000, 382157000

File Segment: EPI;
DWPI Class: T01; T04
Manual Codes (EPI/S-X): T01-J10B2; T04-D04

24/5,K/2   (Item 2 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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0014309926 - Drawing available
WPI ACC NO: 2004-497063/
XRAM Acc No: C2004-184219
XRPX Acc No: N2004-392352
**Generation of rock classifications corresponding to depths in wellbore
involves receiving value indicative of percent dry weight of total
carbonate, total quartz-feldspar-mica, total clay, and values corresponding
to depth in wellbore**
Patent Assignee: SCHLUMBERGER TECHNOLOGY CORP (SLMB)
Inventor: KEAR G R; KUMAR A; SHEHAB G; VILORIA O E; WILLIAMSON D
Patent Family (1 patents, 1 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	
US 6751557	B1	20040615	US 2003338380	A	20030108	200447	B

Priority Applications (no., kind, date): US 2003338380 A 20030108

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
US 6751557	B1	EN	46	17	

   Alerting Abstract US B1
   NOVELTY - Rock classification corresponding to depths in a wellbore is
generated by receiving a value indicative of percent dry weight of total
carbonate, percent dry weight of total quartz-feldspar-mica (QFM), percent
dry weight of total clay for each depths in the wellbore, and values
received corresponding to depth in the wellbore.
   DESCRIPTION - Generation of rock classifications corresponding to depths
in a wellbore involves receiving a value indicative of percent dry weight
of total carbonate, percent dry weight of total quartz-feldspar-mica,
percent dry weight of total clay for each depths in the wellbore, and
values received corresponding to depth in the wellbore; comparing a
particular values at a particular depth in the wellbore with rules
corresponding to rock classifications in a rule base; determining a
particular rock classification that corresponds to rules in the rule base
when a match is found between the particular values or rules in the rule
base, and associating the particular values at particular depth in the
wellbore with the particular rock classification.
   An INDEPENDENT CLAIM is also included for a program storage device
readable for generating rock classifications corresponding to depths in a
wellbore comprising program of instructions executable through the machine.
   USE - For generating rock classifications corresponding to depths in a
wellbore.
   ADVANTAGE - The novel method uses the strengths of the spectroscopy tools
in general and borehole imaging tools, and enhances the subsurface
geological description and interpretation.
   DESCRIPTION OF DRAWINGS - The figure illustrates a computer system that
stores the ternary diagram **model** for generating rock **classification** as
above, corresponding to data points that are output from the elemental
capture spectroscopy sonde.

Title Terms/Index Terms/Additional Words: GENERATE; ROCK; CORRESPOND; DEPTH
   ; RECEIVE; VALUE; INDICATE; DRY; WEIGHT; TOTAL; CARBONATE; QUARTZ;
   FELDSPAR; MICA; CLAY

Class Codes

International Classification (Main): G01V-003/18
US Classification, Issued: 702011000, 702007000, 702008000

File Segment: CPI; EPI
DWPI Class: H01; S03; T01
Manual Codes (EPI/S-X): S03-C02X; T01-J05B1
Manual Codes (CPI/A-M): H01-A02

Alerting Abstract ...DESCRIPTION OF DRAWINGS – The figure illustrates a computer system that stores the ternary diagram **model** for generating rock **classification** as above, corresponding to data points that are output from the elemental capture spectroscopy sonde.

Original Publication Data by Authority

Original Abstracts:
...of rules in a rule base. A computer, which stores a rock classification software which **includes** the **rule** base, will be responsive to certain data points from a Spectroscopy Sonde, will compare each...

0014179950 - Drawing available
WPI ACC NO: 2004-365220/200434
XRPX Acc No: N2004-292110
**Software application defining method for business process management,
involves defining composite process models as construction of one of sub
process models, slots, data models, sub data model and flow rules**
Patent Assignee: BRANDES O (BRAN-I); BRONICKI Y (BRON-I); RASKIN Y
  (RASK-I); SHAKED Y (SHAK-I); SUNGARD BUSINESS INTEGRATION (SUNG-N);
  SZEKELY S (SZEK-I)
Inventor: BRANDES O; BRONICKI Y; RASKIN Y; SHAKED Y; SZEKELY S
Patent Family (5 patents, 105 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	
WO 2004036340	A2	20040429	WO 2003IL824	A	20031012	200434	B
US 20040107414	A1	20040603	US 2002419594	P	20021021	200436	E
			US 2003675915	A	20031001		
AU 2003272058	A1	20040504	AU 2003272058	A	20031012	200467	E
EP 1576439	A2	20050921	EP 2003753899	A	20031012	200562	E
			WO 2003IL824	A	20031012		
AU 2003272058	A8	20051117	AU 2003272058	A	20031012	200638	E

Priority Applications (no., kind, date): US 2003675915 A 20031001; US
  2002419594 P 20021021

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
WO 2004036340	A2	EN	84	20	

National Designated States,Original: AE AG AL AM AT AU AZ BA BB BG BR BY
    BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE EG ES FI GB GD GE GH GM HR HU
    ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX
    MZ NI NO NZ OM PG PH PL PT RO RU SC SD SE SG SK SL SY TJ TM TN TR TT TZ
    UA UG UZ VC VN YU ZA ZM ZW
Regional Designated States,Original: AT BE BG CH CY CZ DE DK EA EE ES FI
    FR GB GH GM GR HU IE IT KE LS LU MC MW MZ NL OA PT RO SD SE SI SK SL SZ
    TR TZ UG ZM ZW

US 20040107414	A1	EN			Related to Provisional US 2002419594
AU 2003272058	A1	EN			Based on OPI patent WO 2004036340
EP 1576439	A2	EN			PCT Application WO 2003IL824
					Based on OPI patent WO 2004036340

Regional Designated States,Original: AL AT BE BG CH CY CZ DE DK EE ES FI
    FR GB GR HU IE IT LI LT LU LV MC MK NL PT RO SE SI SK TR
| AU 2003272058 | A8 | EN | | | Based on OPI patent   WO 2004036340 |

  Alerting Abstract WO A2
  NOVELTY - The method involves defining each software application as a
hierarchy of process models (1610), slots, data models and flow rules. Some
of the process and data **models** are **classified** as composite and are
defined as a construction of one of sub process models, slots, data models,
sub data model and flow rules. The flow rules define both data flow and
process flow to connect a pair of slots, data models and sub data models.
  DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

  1.a visualizable computer executable modeling language system for
    defining software applications

  2.a software program including instructions that are executed to
    define software applications.

  USE - Used for defining software application in business process

management in commercial company.

ADVANTAGE - The composite process models are defined as a construction of one of the sub process models, slots, data models, sub data model and flow rules, where the flow rules connect a pair of slots, data models and the sub data models, thereby effectively avoiding the need for writing of source code for developing software applications.

DESCRIPTION OF DRAWINGS - The drawing shows a screen-shot illustration of visual modeling tool, showing the zoom-in transition from a top-level model to an expanded display of one of the sub-models.

1610 Process model
1620 Trade manager
1625 Display
1630 Input adapter
1635 Output adapter

Title Terms/Index Terms/Additional Words: SOFTWARE; APPLY; DEFINE; METHOD; BUSINESS; PROCESS; MANAGEMENT; COMPOSITE; MODEL; CONSTRUCTION; ONE; SUB; SLOT; DATA; FLOW; RULE

Class Codes
International Classification (Main): G06F, G06F-001/00, G06F-009/44
US Classification, Issued: 717105000

File Segment: EPI;
DWPI Class: T01
Manual Codes (EPI/S-X): T01-J05A2B; T01-J05B2B; T01-J20B1; T01-S03

Alerting Abstract ...process models (1610), slots, data models and flow rules. Some of the process and data **models** are **classified** as composite and are defined as a construction of one of sub process models, slots... ...a visualizable computer executable modeling language system for defining software applications a software program **including instructions** that are executed to define software applications...

Original Publication Data by Authority

Claims:
...comprising:defining each of the software applications as a hierarchy of process models, slots, data **models** and flow rules; **classifying** some of said process models and said data **models** as atomic; **classifying** all other process **models** and data models as composite;defining each of said composite process models as a construction...

```
Set     Items   Description
S1       1504   (CLASSIFY??? OR CLASSIFIE? ? OR CLASSIFICATION)(3N)(MODEL?-
                ?? OR MODELL???)
S2      69000   MACHINE(3N)LEARN??? OR AI OR ARTIFICIAL()INTELLIGENCE
S3    1385469   CONDITION? ? OR  FEATURE? ? OR INSTANCE? ?
S4      99018   STATISTIC?? OR STATS OR NUMERIC??(3N)(DATA OR INFORMATION)
                OR BAYES OR BAYESIAN
S5     538741   RESPONSE? ? OR RESPOND???
S6     330069   RULE OR RULES OR RULESET? ? OR INSTRUCTION? ?
S7      55382   S6(3N)(ADD OR ADDS OR ADDED OR ADDING OR ADDITION?? OR INC-
                LUD??? OR INCLUSION OR INCORPORAT??? OR UPDAT???)
S8          0   S1(100N)S2(100N)S3(20N)S4:S5(20N)S7
S9         13   S1(100N)S7
S10        12   S9 NOT AD=20031216:20060809/PR
S11       191   S1(100N)S3(20N)S4
S12        32   S11(100N)S6
S13        32   S12 NOT S10
S14        15   S13 NOT AD=20031216:20060809/PR
```

10/3,K/1   (Item 1 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS
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01897690
Apparatus and method for classifying an audio signal
Vorrichtung und Verfahren zur Klassifizierung eines Audiosignals
Appareil et methode pour classer un signal audio
PATENT ASSIGNEE:
  Sony International (Europe) GmbH, (2328252), Kemperplatz 1, 10785 Berlin,
    (DE), (Applicant designated States: all)
INVENTOR:
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  Kemp, Thomas Sony International (Europe) GmbH, Stuttgart Technology
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  Kompe, Ralf Sony International (Europe) GmbH, Stuttgart Technology Center
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LEGAL REPRESENTATIVE:
  Korber, Martin, Dipl.-Phys. et al (88321), Mitscherlich & Partner
    Patentanwalte Sonnenstrasse 33, 80331 Munchen, (DE)
PATENT (CC, No, Kind, Date): EP 1531478 A1 050518 (Basic)
APPLICATION (CC, No, Date):   EP 2003026046 031112;
DESIGNATED STATES: AT; BE; BG; CH; CY; CZ; DE; DK; EE; ES; FI; FR; GB; GR;
  HU; IE; IT; LI; LU; MC; NL; PT; RO; SE; SI; SK; TR
EXTENDED DESIGNATED STATES: AL; LT; LV; MK
INTERNATIONAL PATENT CLASS (V7): G11B-027/28; G10L-015/26; G10L-011/02
ABSTRACT WORD COUNT: 179
NOTE:
  Figure number on first page: 1

LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	200520	1598
SPEC A	(English)	200520	9940
Total word count - document A			11538
Total word count - document B			0
Total word count - documents A + B			11538

...SPECIFICATION classifying rules.
    Advantageously, the method further comprises the steps of:
  - using Neuronal Networks as classifying **rules** ; and
  - **updating** weights used in the Neuronal Networks to train the Neuronal
  Networks.
    Preferably, the method further comprises the steps of:
  - using Gaussian Mixture **Models** as **classifying** rules; and
  - adapting parameters for maximum likelihood linear regression
  transformation and/or Maximum a Posteriori...

01095373   **Image available**
**MEDICAL DECISION SUPPORT SYSTEMS UTILIZING GENE EXPRESSION AND CLINICAL
    INFORMATION AND METHOD FOR USE**
**SYSTEMES DE SUPPORT DE DECISION MEDICALE UTILISANT L'EXPRESSION GENIQUE
    AINSI QUE DES INFORMATIONS CLINIQUES, ET PROCEDES D'UTILISATION
    CORRESPONDANTS**
Patent Applicant/Assignee:
  PACIFIC EDGE BIOTECHNOLOGY LTD, Centre for Innovation, 87 St. David
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    designated states except: US)
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    (Nationality), (Designated only for: US)
  SULLIVAN Michael James, 9 Cottesmore Close, Christchurch, NZ, NZ
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  REEVE Anthony Edmund, 22 Como Str., Dunedin, NZ, NZ (Residence), NZ
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Legal Representative:
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    Fourth Floor, San Francisco, CA 94111-4156, US,
Patent and Priority Information (Country, Number, Date):
  Patent: WO 200416218 A2-A3 20040226 (WO 0416218)
  Application: WO 2003US25563 20030815 (PCT/WO US03025563)
  Priority Application: US 2002403756 20020815
Designated States:
(Protection type is "patent" unless otherwise stated - for applications
prior to 2004)
  AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ
  EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR
  LS LT LU LV MA MD MG MK MN MW MX MZ NI NO NZ OM PG PH PL PT RO RU SC SD
  SE SG SK SL SY TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW
  (EP) AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LU MC NL PT RO SE
  SI SK TR
  (OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG
  (AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW
  (EA) AM AZ BY KG KZ MD RU TJ TM
Publication Language: English
Filing Language: English
Fulltext Word Count: 6644
Fulltext Availability:
  Detailed Description

Detailed Description
... rk) and W2(rk) according to (2) and (3) (in
  case of in-ofIn system **update** all the m **rule** nodes with
  the highest Al activation).

  Apply aggregation procedure of rule nodes after each group...

  ...complexity of the data used for their training; (ii) they can perform
  both clustering and **classification**/prediction; (iii) **models** can be
  adapted on new data without the need to be retrained on old data...

00290010
PATTERN RECOGNITION SYSTEM WITH STATISTICAL CLASSIFICATION
SYSTEME DE RECONNAISSANCE DE FORMES A CLASSIFICATION STATISTIQUE
Patent Applicant/Assignee:
  MASSACHUSETTS INSTITUTE OF TECHNOLOGY,
  MENON Murali M,
  BOUDREAU Eric R,
Inventor(s):
  MENON Murali M,
  BOUDREAU Eric R,
Patent and Priority Information (Country, Number, Date):
  Patent: WO 9508159 A1 19950323
  Application: WO 94US10527 19940916   (PCT/WO US9410527)
  Priority Application: US 93122705 19930916
Designated States:
(Protection type is "patent" unless otherwise stated – for applications
prior to 2004)
  CA JP US AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE
Publication Language: English
Fulltext Word Count: 12599
Fulltext Availability:
  Detailed Description

Detailed Description
... match category, and the definition of the category
  is updated in accordance with a learning **rule** to **include**
  the contribution from the new training pattern, If the
  correlation is below the threshold, a...

...features or views of
  the subjects. For example, if the system is used to
  visually **classify** automobiles by **model** , each model of
  automobile would be a separate class. Specific
  recognizable features of the automobiles...

01204068
CHARACTERIZING BIOLOGICAL STIMULI BY RESPONSE CURVES
CARACTERISATION DE STIMULI BIOLOGIQUES PAR COURBES DE REPONSE
Patent Applicant/Assignee:
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    US, US (Residence), US (Nationality), (For all designated states
    except: US)
Patent Applicant/Inventor:
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Legal Representative:
  GARRETT Arthur S (agent), Finnegan, Henderson, Farabow, Garrett & Dunner,
    L., L.P., 1300 I Street, N.W., Washington, D.C. 20005-3315, US,
Patent and Priority Information (Country, Number, Date):
  Patent: WO 200510677 A2 20050203 (WO 0510677)
  Application: WO 2004US22519 20040716 (PCT/WO US04022519)
  Priority Application: US 2003509040 20030718
Designated States:
(All protection types applied unless otherwise stated – for applications
2004+)
  AE AG AL AM AT AU AZ BA BB BG BR BW BY BZ CA CH CN CO CR CU CZ DE DK DM
  DZ EC EE EG ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC
  LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NA NI NO NZ OM PG PH PL PT RO
  RU SC SD SE SG SK SL SY TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW
  (EP) AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LU MC NL PL PT RO
  SE SI SK TR
  (OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG
  (AP) BW GH GM KE LS MW MZ NA SD SL SZ TZ UG ZM ZW
  (EA) AM AZ BY KG KZ MD RU TJ TM
Publication Language: English
Filing Language: English
Fulltext Word Count: 24740

Fulltext Availability:
  Detailed Description
  Claims

Detailed Description
... provides a computer program product comprising a machine readable
  medium on which is provided program **instructions** for creating a
  biological classification model for classifying the effect of stimuli on
  biological systems...

...signatures representing the multivariate response of stimuli at various
  levels; selecting a collection of biological **features** to be used in a
  proposed model; computing distances between the stimulus response paths
  in a biological **feature** space defined by the biological **features**
  selected; characterizing the proposed model based on how well it groups
  stimulus response paths into the known classifications of the associated
  stimuli in the biological **features** space; repeating the selecting,
  computing, and characterizing for a plurality of selected collections of
  biological **features** ; and choosing a proposed **model** as the biological

classification model based on the characterizations made. In one embodiment of the computer program product the collection of biological **features** selected by the **instructions** may comprise one or more of morphological details, texture measures for a marker, intensity measures for a marker, **statistical** details, and values derived from any of the foregoing of a cell or cell population. In another embodiment of the computer program product the **instructions** for computing the distances may comprise **instructions** for computing an angle or an inner products of vectors, each from a common center point in the biological **feature** space, wherein a first vector passes through one of the signatures or points of a...

...of a second stimulus response path. In another embodiment of the computer program product the **instructions** for computing the distances may comprise **instructions** for computing Euclidean distances.

[0027] In another aspect the invention provides a method of determining ...

Claim
... 40 A computer program product comprising a machine readable medium on which is provided program **instructions** for creating a biological classification model for classifying the effect of stimuli on biological systems...

...representing
the multivariate response of stimuli at various levels;
(b) selecting a collection of biological **features** to be used in a proposed model; (c) computing distances between the stimulus response paths in a biological **feature**
space defined by the biological **features** selected in (b);
(d) characterizing the proposed model based on how well it groups stimulus response paths into the known classifications of the associated stimuli in the biological **features**
space;
(e) repeating (b) - (d) for a plurality of selected collections of biological **features** ; and (f) choosing a proposed **model** as the biological **classification model** based on the
characterizations made in (d).
41 The computer program product of claim 40, wherein the collection of biological **features** selected by the **instructions** in (b) comprise one or more of morphological details, texture measures for a marker, intensity measures for a marker, **statistical** details, and values derived from any of the foregoing of a cell or cell
population.

42 The computer program product of claim 40, wherein the **instructions** for computing the distances in (c) comprise **instructions** for computing an angle or an inner products of vectors, each from a common center point in the biological **feature** space, wherein a first vector passes through one of the signatures or points of a...

...a second stimulus response path.

43 The computer program product of claim 40, wherein the **instructions** for computing the distances in (c) comprise **instructions** for computing Euclidean distances.

44 A method of determining a separation distance between response paths ...

01116723   **Image available**
BINARY PREDICTION TREE MODELING WITH MANY PREDICTORS AND ITS USES IN CLINICAL AND GENOMIC APPLICATIONS
MODELISATION D'UN ARBRE PREVISIONNEL BINAIRE A PLUSIEURS PREDICTEURS, ET SON UTILISATION DANS DES APPLICATIONS CLINIQUES ET GENOMIQUES

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    (Nationality), (For all designated states except: US)
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  WEST Mike, 11 Beaver Place, Durham, NC 27705, US, US (Residence), GB
    (Nationality), (Designated only for: US)
  HUANG Andrew T, 4841 Moriah Hill, Durham, NC 27707, US, US (Residence),
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Legal Representative:
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    Boston, MA 02110-2624, US,

Patent and Priority Information (Country, Number, Date):
  Patent: WO 200438376 A2-A3 20040506 (WO 0438376)
  Application: WO 2003US33946 20031024 (PCT/WO US03033946)
  Priority Application: US 2002420729 20021024; US 2002421062 20021025; US
    2002421102 20021025; US 2002424715 20021108; US 2002424718 20021108; US
    2002424701 20021108; US 2002425256 20021112; US 2003448462 20030221; US
    2003448461 20030221; US 2003457877 20030327; US 2003458373 20030331
Designated States:
(Protection type is "patent" unless otherwise stated - for applications
prior to 2004)
  AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ
  EC EE EG ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK
  LR LS LT LU LV MA MD MG MK MN MW MX MZ NI NO NZ OM PG PH PL PT RO RU SC
  SD SE SG SK SL SY TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW
  (EP) AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LU MC NL PT RO SE
  SI SK TR
  (OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG
  (AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW
  (EA) AM AZ BY KG KZ MD RU TJ TM
Publication Language: English
Filing Language: English
Fulltext Word Count: 300141

Fulltext Availability:
  Detailed Description

Detailed Description
... GENOMIC APPLICATIONS
  FIELD OF THE 4INVENTION
  The field of this invention is the application of **classification** tree
  models incorporating **Bayesian** analysis to the **statistical** prediction
  of binary outcomes especially in clinical, genomic and medical
  applications.

  BACKGROUND OF THE INVENTION
   Bayesian analysis is an approach to **statistical** analy8is that is
   based on the Bayeg's law, which states that the posterior probability...

...the latter attempts to establish confidence intervals around parameters,
and/or falsify apriori null-hypotheses, & **Bayesian** approach.attempts to
keep track of how a-priori expectations about some-phenomenon of interest
...

...more measurement variables and one variable that determines that class
of the sample, Various splitting **rules** have been used; however, the
success of the predictive ability varies considerably as data sets...

01049245   **Image available**
**MEDICAL APPLICATIONS OF ADAPTIVE LEARNING SYSTEMS USING GENE EXPRESSION
   DATA**
**APPLICATIONS MEDICALES DE SYSTEMES ADAPTATIFS D'APPRENTISSAGE UTILISANT DES
   DONNEES D'EXPRESSION DE GENES**
Patent Applicant/Assignee:
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    David Street, Dunedin, NZ, NZ (Residence), NZ (Nationality), (For all
    designated states except: US)
Patent Applicant/Inventor:
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    (Nationality), (Designated only for: US)
  SULLIVAN Michael James, 9 Cottesmore Close, Christchurch, NZ, NZ
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  GUILFORD Parry John, 38 Riccarton Road East, East Taieri, Dunedin, NZ, NZ
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Legal Representative:
  CALHOUN Douglas C (et al) (agent), A J Park, 6th Floor Huddart Parker
    Building, 1 Post Office Square, PO Box 949, 6015 Wellington, NZ,
Patent and Priority Information (Country, Number, Date):
  Patent: WO 200379286 A1 20030925 (WO 0379286)
  Application: WO 2003NZ45 20030317 (PCT/WO NZ0300045)
  Priority Application: NZ 517817 20020315
Designated States:
(Protection type is "patent" unless otherwise stated - for applications
prior to 2004)
  AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ
  EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR
  LS LT LU LV MA MD MG MK MN MW MX MZ NI NO NZ OM PH PL PT RO RU SC SD SE
  SG SK SL TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW
  (EP) AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LU MC NL PT RO SE
  SI SK TR
  (OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG
  (AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW
  (EA) AM AZ BY KG KZ MD RU TJ TM
Publication Language: English
Filing Language: English
Fulltext Word Count: 20757
Fulltext Availability:
  Detailed Description

Detailed Description
... utilising Evolving Connectionsist Systems (ECOS) techniques have the
   following advantages when compared with the traditional **statistical** and
   neural network techniques: (i) they have a flexible structure that
   reflects the complexity of the data used for their training; (ii) they
   perform both clustering and **classification**/prediction; (iii) the
   models can be adapted on new data without the need to be retrained on
   old data; (iv) they can be used to extract **rules** (profiles) of
   different sub-classes of samples. The **rules** (profiles) are fuzzy with
   some **statistical** coefficients attached.

It is therefore an object of the present invention to provide a method for determining a relationship between gene expression data and one or more **conditions** or prognostic outcome, or at least to provide the public with a useful choice.

SUMMARY...

...input layer comprising one or more input nodes configured to receive gene expression data; a **rule** base layer comprising one or more **rule** nodes; an output layer comprising one or more output nodes configured to output one or more conditions; and an adaptive component configured to extract one or more **rules** from the **rule** base layer representing relationships between the gene expression data and the one or more conditions...

00857259   **Image available**
SYSTEM AND METHOD FOR AUTOMATICALLY CLASSIFYING TEXT
PROCEDE ET SYSTEME DE CLASSIFICATION AUTOMATIQUE DE TEXTE
Patent Applicant/Assignee:
  KANISA INC, 19925 Stevens Creek Blvd., Suite 150, Cupertino, CA 95014, US
    , US (Residence), US (Nationality)
Inventor(s):
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  HUFFMAN Scott B, 195 Opal Avenue, Redwood City, CA 94062, US,
Legal Representative:
  VIKSNINS Ann S (et al) (agent), Schwegman, Lundberg, Woessner & Kluth,
    P.O. Box 2938, Minneaplois, MN 55402, US,
Patent and Priority Information (Country, Number, Date):
  Patent: WO 200190921 A2-A3 20011129 (WO 0190921)
  Application: WO 2001US16872 20010525 (PCT/WO US0116872)
  Priority Application: US 2000206975 20000525
Designated States:
(Protection type is "patent" unless otherwise stated - for applications
prior to 2004)
  AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EC
  EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS
  LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ
  TM TR TT TZ UA UG UZ VN YU ZA ZW
  (EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR
  (OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG
  (AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW
  (EA) AM AZ BY KG KZ MD RU TJ TM
Publication Language: English
Filing Language: English
Fulltext Word Count: 14320

Fulltext Availability:
  Detailed Description

Detailed Description
... when such tecl:miques are applied to large volumes of text.

  [08] Another approach is **rule** -based text classification systems which
  classify documents according to **rules** written by people about the
  relationship between WO 01/90921 PCT/USO1/16872 categories. Once
  developed, these **statistical** models may be used to classify new
  documents. In systems that do utilize a learning...
  ...categorized training data or correctly categorized training data with
  extraneous or unusual vocabulary degrades the **statistical   model** ,
  causing the resulting **classifier** to perform poorly.

  [10] Of the prior art systems that utilize training data, most do...

  ...utilize user input, do not allow users to directly affect the quantified
  relationship between vocabulary **features** and classification categories,
  but simply allow the user to change the training data. Yet another...

00844343   **Image available**
IDENTIFICATION AND MANAGEMENT OF FRAUDULENT CREDIT/DEBIT CARD PURCHASES AT MERCHANT ECOMMERCE SITES
IDENTIFICATION ET CONTROLE D'ACHATS FRAUDULEUX PAR CARTES DE CREDIT/DEBIT A DES SITES MARCHANDS DE COMMERCE ELECTRONIQUE

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  WILHELM Wesley K, 3812 E. 48th Avenue, Spokane, WA 99223, US,
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Legal Representative:
  SACHS Robert R (et al) (agent), Fenwick & West LLP, Two Palo Alto Square, Palo Alto, CA 94306, US,
Patent and Priority Information (Country, Number, Date):
  Patent: WO 200177959 A1 20011018 (WO 0177959)
  Application: WO 2001US11221 20010405 (PCT/WO US0111221)
  Priority Application: US 2000195156 20000406; US 2001782681 20010212
Designated States:
(Protection type is "patent" unless otherwise stated - for applications prior to 2004)
  AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE
  ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT
  LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM
  TR TT TZ UA UG UZ VN YU ZA ZW
  (EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR
  (OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG
  (AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW
  (EA) AM AZ BY KG KZ MD RU TJ TM
Publication Language: English
Filing Language: English
Fulltext Word Count: 26394

Fulltext Availability:
  Detailed Description

Detailed Description
... platforms that may be used to practice the invention. Thus, the particular functions of the **rule** engine, policy management engine, scoring server, order management workstation, and so forth may be provided...
...a combination of hardware and software, as described, or entirely in hardware elements. Also, the **statistical**
75
model may be implemented in a variety of modes, including a neural network, a multivariate regression model, or any other **model** that **classifies** inputs based on **statistical** analysis of historical exemplars. The particular capjtalization or naming of the modules, protocols, **features** , attributes, data structures., or any other aspect is not mandatory or significant, and the mechanisms that implement the invention or its **features** may have different names or formats; likewise the details of the specific data structures, messages, and APIs may be changed without departing from the **features** and operations of the invention. Finally, it should be noted that the language used in...

00820273   **Image available**
NON-INVASIVE IN-VIVO TISSUE CLASSIFICATION USING NEAR-INFRARED MEASUREMENTS
**CLASSIFICATION   NON   INVASIVE   IN   VIVO DE TISSUS PAR DES MESURES DANS L'IR
    PROCHE**
Patent Applicant/Assignee:
  INSTRUMENTATION METRICS INC, 2085 Technology Circle, Suite 302, Tempe, AZ
    85284, US, US (Residence), US (Nationality)
Inventor(s):
  MALIN Stephen, 16228 S. 4th Street, Phoenix, AZ 85048, US,
  RUCHTI Timothy L, 1501 West Sea Haze Drive, Tempe, AZ 85282, US,
  RENNERT Jessica, 8235 E. McDonald, Scottsdale, AZ 85250, US,
Legal Representative:
  GLENN Michael A (et al) (agent), Glenn Patent Group, Suite L, 3475 Edison
    Way, Menolo Park, CA 94025, US,
Patent and Priority Information (Country, Number, Date):
  Patent: WO 200153804 A1 20010726 (WO 0153804)
  Application: WO 2000US32976 20001204 (PCT/WO US0032976)
  Priority Application: US 2000487547 20000119
Designated States:
(Protection type is "patent" unless otherwise stated - for applications
prior to 2004)
  AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM EE ES FI GB
  GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA
  MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA
  UG UZ VN YU ZA ZW
  (EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR
  (OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG
  (AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW
  (EA) AM AZ BY KG KZ MD RU TJ TM
Publication Language: English
Filing Language: English
Fulltext Word Count: 6568

Fulltext Availability:
  Detailed Description

Detailed Description
...   tissue classification according to chemical and structural properties
   that employs NIR spectral measurements. A tissue **classification   model**
   is developed by taking NIR spectral absorbance measurements from an
   exemplary population of individuals.

   The spectral measurements are assessed to identify **features** of interest
   most likely 1 5 to represent variation between tissue types. **Statistical**
    and analytical techniques are used to enhance the **features** of interest
   and extract those **features** representing variation within a tissue. A
   classification routine determines the best model to define classes...

   ...the variation within a class is small compared to the variation between
   classes. A decision **rule** assigns class membership to individual members
   of the representative population based on the structural and chemical
   properties of each individual's tissue.

   The disclosed tissue **classification   model** is applied in a
   non-invasive, in-vivo tissue classification procedure using NIR spectral
   measurements to classify individual tissue samples. The **classification**

model defines classes and provides a set of exemplary data that enable the segregation of test...DETAILED DESCRIPTION
Various features of biological tissue can be measured using NIR spectroscopy because these **features** often have unique signatures in the NIR wavelength region (700 to 2500nm) as a result of their absorbance and scattering properties. Many of these **features** vary according to tissue type and are thus useful for classifying tissue into separate types. Useful **features** that can be measured using NIR absorbance and scattering patterns include, but are not limited...
...fraction of blood in tissue, spectral characteristics related to environmental influences, and hematocrit levels. The **features** that vary according to tissue type may be isolated from tissue sample spectra using **statistical** techniques and can then be used to classify the sample accordingly.

DEVELOPMENT OF A TISSUE **CLASSIFICATION MODEL**
A non-invasive, in-vivo method for the classification of tissue samples according to chemical, physiological, and structural differences is described herein. The **classification model** employs the use of NIR measurements to quantify chemical, structural, or physiological properties of the...

...1 provides a flow 1 5 diagram of a general procedure used to develop a **classification model** . In general, the algorithm for developing a **classification model** comprises the following steps.

1 . Providing exemplary NIR measurements (1 1)
2. Spectral **feature** selection (12)
3. **Feature** enhancement (1 3)
4. **Feature** extraction (14)
5. Factor selection (1 5)
6. Classification calibration (16)
7. Application of a Decision **Rule** (17)
8. Assignment to a group (1 8)
MEASUREMENT
NIR measurements (1 1) are first...in the art can appreciate other methods of classification are readily applicable.

1 5 DECISION **RULE**
A decision **rule** (1 7) is developed to determine to which class a sample belongs. The criterion the decision **rule** employs to determine the class membership of the sample is whether the sample's projection...

...the
mean of the two population means (see R. Johnson and D. Wichern Applied Multivariate **Statistical** Analysis, 3'. ed., Prentice-Hall, New Jersey (1992)). The scalar L is compared with L...

...is assigned to population two (1 8).

CLASSIFICATION OF TISSUE SAMPLES
Implementation of the disclosed **classification model** for **classification** of actual tissue samples is described in detail in the parent application to the current...

...Ruchti. In general, the steps of a procedure for tissue classification are.

. NIR measurements
2. **Feature** extraction

3. Pattern classification
4. Assignment of class membership
A set of absorbance values pertaining...

00729920   **Image available**
SYSTEM AND METHOD FOR NONINVASIVE BLOOD ANALYTE MEASUREMENTS
SYSTEME ET PROCEDE DE MESURES NON VULNERANTES D'UN ANALYTE SANGUIN
Patent Applicant/Assignee:
  INSTRUMENTATION METRICS INC, Suite 302, 2085 Technology Circle, Tempe, AZ
    85284, US, US (Residence), US (Nationality)
Inventor(s):
  MALIN Stephen F, 16228 S. 4th Street, Phoenix, AZ 85042, US,
  RUCHTI Timothy L, 1501 West Sea Haze Drive, Gilbert, AZ 85233, US,
Legal Representative:
  GLENN Michael A (et al) (agent), 3475 Edison Way, Menlo Park, CA 94025,
    US,
Patent and Priority Information (Country, Number, Date):
  Patent: WO 200042907 A1 20000727 (WO 0042907)
  Application: WO 2000US1378 20000119 (PCT/WO US0001378)
  Priority Application: US 99116883 19990122; US 99359191 19990722
Designated States:
(Protection type is "patent" unless otherwise stated - for applications
prior to 2004)
  AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GD GE GH
  GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN
  MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG UZ VN YU ZA
  ZW
  (EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE
  (OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG
  (AP) GH GM KE LS MW SD SL SZ TZ UG ZW
  (EA) AM AZ BY KG KZ MD RU TJ TM
Publication Language: English
Filing Language: English
Fulltext Word Count: 14794

Fulltext Availability:
  Detailed Description

Detailed Description
...   representation of the pattern classification system. The system has
  two general functions.

  The extraction of **features** , and
  * The classification of the **features** according to a **classification
  model** and decision **rule** .

   Feature extraction 25 is any mathematical transformation that enhances
  a particular aspect or quality of the data that is useful for
  interpretation. The **classification   model** 30 is a method for
  determining a set of similarity measures with the predefined classes. The
  decision **rule** is the assignment of class membership 32 on the basis of
  a set of measures...

...Wiley and Sons, New York (1973); and J. Schurmann, Pattern
  Classification. A Unified View of **Statistical** and Neural Approaches,
  John Wiley & Sons, Inc., New York (1996)).

  Within this framework, two different...

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          (c)2006 Japan Science and Tech Corp(JST)
File   95:TEME-Technology & Management 1989-2006/Aug W1
          (c) 2006 FIZ TECHNIK
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          (c) 2006 The HW Wilson Co.
File  111:TGG Natl.Newspaper Index(SM) 1979-2006/Jul 27
          (c) 2006 The Gale Group
File  144:Pascal 1973-2006/Jul W3
          (c) 2006 INIST/CNRS
File  239:Mathsci 1940-2006/Sep
          (c) 2006 American Mathematical Society
File  256:TecInfoSource 82-2006/Nov
          (c) 2006 Info.Sources Inc
File  434:SciSearch(R) Cited Ref Sci 1974-1989/Dec
          (c) 2006 The Thomson Corp


Set     Items   Description
S1      31457   (CLASSIFY??? OR CLASSIFIE? ? OR CLASSIFICATION)(3N)(MODEL?-
                ?? OR MODELL???)
S2     416135   MACHINE(3N)LEARN??? OR AI OR ARTIFICIAL()INTELLIGENCE
S3    8298189   CONDITION? ? OR  FEATURE? ? OR INSTANCE? ?
S4    2684462   STATISTIC?? OR STATS OR NUMERIC??(3N)(DATA OR INFORMATION)
                OR BAYES OR BAYESIAN
S5    3874541   RESPONSE? ? OR RESPOND???
S6    1134414   RULE OR RULES OR RULESET? ? OR INSTRUCTION? ?
S7      30104   S6(3N)(ADD OR ADDS OR ADDED OR ADDING OR ADDITION?? OR INC-
                LUD??? OR INCLUSION OR INCORPORAT??? OR UPDAT???)
S8          3   S1 AND S2 AND S3 AND S4:S5 AND S7
S9         97   S1 AND S7
S10         8   S9 AND S3 AND S4
S11         6   S10 NOT S8
S12       175   S1 AND S3 AND S4 AND S6
S13     29090   NODE? ?(3N)(MULTI OR MULTIPLE OR MULTIPLICITY OR PLURAL OR
                PLURALITY OR MANY OR NUMEROUS OR SEVERAL OR TWO)
S14         3   S13 AND S12
```

NPL

01347834 ORDER NO: AADNN-68128
LEARNING IN THE REAL WORLD ENVIRONMENT: A CLASSIFICATION MODEL **BASED ON SENSITIVITY TO WITHIN-DIMENSION AND BETWEEN-CATEGORY VARIATION OF** FEATURE **FREQUENCIES**
  Author: LAM, NEWMAN M. K.
  Degree: PH.D.
  Year: 1991
  Corporate Source/Institution: UNIVERSITY OF VICTORIA (CANADA) (0244)
  Supervisor: JAMES MACGREGOR
  Source: VOLUME 53/06-A OF DISSERTATION ABSTRACTS INTERNATIONAL.
           PAGE 2103. 196 PAGES
  Descriptors: POLITICAL SCIENCE, PUBLIC ADMINISTRATION
  Descriptor Codes: 0617
  ISBN: 0-315-68128-4

    Research on **machine learning** has taken numerous different
directions. The present study focussed on the micro-structural
characteristics of learning system. It was postulated that learning systems
consist of a macro-structure which controls the flow of information, and a
micro-structure which manipulates information for decision making. A review
of the literature suggested that the basic function of the micro-structure
of learning systems was to make a choice among a set of alternatives. This
decision function as then equated with the task of making classification
decisions. On the basis of the requirements for practical learning systems,
the **feature** frequency approach was chosen for model development. An
analysis of the **feature** frequency approach indicated that an effective
model must be sensitive to both within-dimension and between-category
variations in frequencies. A model was then developed to provide for such
sensitivities. The model was based on the **Bayes** ' Theorem with an
assumption of uniform prior probability of occurrence for the categories.
This model was tested using data collected for neuropsychological diagnosis
of children. Results of the tests showed that the model was capable of
learning and provided a satisfactory level of performance. The performance
of the model was compared with that of other models designed for the same
purpose. The other models **included** NEXSYS, a **rule** -based system
specially designed for this type of diagnosis, discriminant analysis, which
is a **statistical** technique widely used for pattern recognition, and
neural networks, which attempt to simulate the neural activities of the
brain. Results of the tests showed that the model's performance was
comparable to that of the other models. Further analysis indicated that the
model has certain advantages in that it has a simple structure, is capable
of explaining its decisions, and is more efficient than the other models.

01276170   ORDER NO: AAD93-04404
COMPETITIVE LEARNING AND MAP FORMATION IN ARTIFICIAL NEURAL NETWORKS USING COMPETITIVE ACTIVATION MECHANISMS

     Inhibitory effects in artificial neural networks have usually been achieved via direct inhibitory connections between competing nodes. This mechanism is limited by the large number of inhibitory connections that are sometimes necessary, and the difficulty of designing competitive interactions with inhibitory connections for some applications. Because of these limitations competitive activation mechanisms have been introduced to provide competitive interactions between nodes using strictly excitatory connections. Competitive activation mechanisms have been successfully applied to problems in Al, cognitive modeling, and computational neuroscience, sometimes producing effects which are difficult or impossible to achieve with noncompetitive activation mechanisms. However, applications using competitive activation mechanisms have been limited by the absence of effective learning methods.
     This dissertation develops the first unsupervised learning method for artificial neural networks using competitive activation mechanisms. The learning method, a variant of competitive learning, is shown to be effective through both computer simulations and mathematical analysis. Competitive learning can be used for classification tasks involving the separation of input pattern clusters; analysis shows that a typical competitive activation **model** produces a different **classification** than a typical noncompetitive activation model using competitive learning. The unsupervised competitive learning **rule** is extended to **include** reinforced and supervised versions which are also shown to function effectively.
     Competitive learning has been used successfully with noncompetitive activation mechanisms in the past for **feature** map formation in many applications (speech recognition, robotic control, optimization, brain modelling, etc.). Computer simulations show that competitive activation models can also produce computational map formation with different structural characteristics than comparable noncompetitive activation models. Further, competitive activation models can generate more rapid and extensive map reorganization following network damage than noncompetitive activation models. Competitive activation models also support topographic map formation/refinement and map reorganization in **response** to changes in the structure of the input stimuli. Evaluating topographic map formation necessitated the development of new measurement and plotting techniques which are presented here. This work shows that competitive learning using competitive activation mechanisms is a powerful approach for artificial neural networks.

06698074   INSPEC Abstract Number: C9710-1220-059
 Title: Modelling with words using Cartesian granule features
   Author(s): Baldwin, J.F.; Martin, T.P.; Shanahan, J.G.

   Author Affiliation: Dept. of Eng. Math., Bristol Univ., UK

   Conference Title: Proceedings of the Sixth IEEE International Conference
on Fuzzy Systems (Cat. No.97CH36032)   Part vol.3   p.1295-300 vol.3
   Publisher: IEEE, New York, NY, USA
   Publication Date: 1997 Country of Publication: USA   3 vol. (xii+1730)
pp.
   ISBN: 0 7803 3796 4   Material Identity Number: XX97-02176
   U.S. Copyright Clearance Center Code: 0 7803 3796 4/97/$10.00
   Conference   Title: Proceedings of 6th International Fuzzy Systems
Conference
   Conference Sponsor: IEEE Neural Networks Council
   Conference Date: 1-5 July 1997   Conference Location: Barcelona, Spain
   Language: English   Document Type: Conference Paper (PA)
   Treatment: Theoretical (T)

   Abstract: We present Cartesian granule **feature** , a new multidimensional
 feature   formed over the cross product of fuzzy partition labels.
Traditional fuzzy modelling approaches, mainly use flat **features** (one
dimensional **features**) and, consequently suffer from decomposition error
when modelling systems where there are dependencies between the input
variables. Cartesian granule **features** help reduce (if not eliminate) the
error due to the decompositional usage of **features** . In the approach taken
here, we label the (fuzzy) subsets which partition the various universes
and incorporate these labels in the form of Cartesian granules into our
modelling process. Fuzzy sets defined in terms of these Cartesian granules,
are extracted automatically from **statistical** data using the theory of
mass assignments, and are **incorporated** into fuzzy **rules** . Consequently
we not only compute with words, we also model with words. Due to the
interpolative nature of fuzzy sets, this approach can be used to **model**
 both **classification** and prediction problems. Overall Cartesian granule
 features   **incorporated**   into fuzzy **rules** yield glass-box models and
when demonstrated on the ellipse classification problem yields a
classification accuracy of 98%, outperforming standard modelling approaches
such as neural networks and the data browser. (21 Refs)
   Subfile: C
   Descriptors: forecasting theory; fuzzy logic; fuzzy set theory; fuzzy
systems; inference mechanisms; modelling; pattern classification
   Identifiers: Cartesian granule **features** ; multidimensional **feature** ;
fuzzy partition labels; fuzzy subsets; **statistical** data; theory of mass
assignments; fuzzy rules; prediction problems; glass-box models; ellipse
classification problem; classification accuracy; fuzzy modelling
   Class Codes: C1220 (Simulation, modelling and identification); C1160 (
Combinatorial mathematics); C1250 (Pattern recognition); C1290 (
Applications of systems theory); C1230 (Artificial intelligence)

04965445   INSPEC Abstract Number: A91118612, C91060366
   Title: **Computer analysis and pattern recognition of Doppler blood flow
spectra for disease classification in the lower limb arteries**
   Author(s): Allard, L.; Langlois, Y.E.; Durand, L.-G.; Roederer, G.O.;
Beaudoin, M.; Cloutier, G.; Roy, P.; Robillard, P.
   Author Affiliation: Biomed. Eng. Lab., Clinical Res. Inst. of Montreal,
Que., Canada
   Journal: Ultrasound in Medicine & Biology   vol.17, no.3   p.211-23
   Publication Date: 1991 Country of Publication: UK
   CODEN: USMBA3 ISSN: 0301-5629
   U.S. Copyright Clearance Center Code: 0301-5629/91/$3.00+0.00
   Language: English   Document Type: Journal Paper (JP)
   Treatment: Practical (P); Experimental (X)

   Abstract: A computer processing method was developed to objectively
classify disease in the lower limb arteries evaluated by noninvasive
ultrasonic duplex scanning. This method analyzes Doppler blood flow
signals, extracts diagnostic **features** from Doppler spectrograms and
classifies the severity of the disease into three categories of diameter
reduction (0-19%, 20-49% and 50-99%). The **features** investigated were
based on frequency **features** obtained at peak systole, spectral broadening
indices and normalized amplitudes of the power spectrogram computed in
various positive and negative frequency bands. A total of 379 arterial
segments studied from the aorta to the popliteal artery were classified
using a pattern recognition method based on the **Bayes model** . Two
 classification schemes using a **two - node** decision **rule** were tested.
Both schemes gave similar results, the first one provided an overall
accuracy of 83% (Kappa=0.42) and the second an overall accuracy of 81%
(Kappa=0.35)   when   compared   with   conventional   biplane   contrast
arteriography. These performances, especially for the 0 to 19% lesion
category, are better than the one obtained by the technologist
(accuracy=76% and Kappa=0.33), based on visual interpretation of the
Doppler spectrograms. (38 Refs)
   Subfile: A C
   Descriptors: biomedical ultrasonics; computerised pattern recognition;
Doppler effect; haemodynamics; medical diagnostic computing; spectral
analysis
   Identifiers: 2-node decision **rule** ; Doppler blood flow spectra; disease
classification; lower limb arteries; noninvasive ultrasonic duplex scanning
; diameter reduction; peak systole; spectral broadening indices; arterial
segments; aorta; popliteal artery; **Bayes** model; lesion
   Class Codes: A8760B (Sonic and ultrasonic radiation); A8745H (
Haemodynamics, pneumodynamics); A8770E (Diagnostic methods and
instrumentation); C7330 (Biology and medicine); C5260 (Digital signal
processing)